

UNIDIRECTIONAL VALVES AND METHODS FOR THEIR USE
ABSTRACT

The invention provides a flap valve for controlling the air pressure within a protected space defined by walls, the flap valve having a valve flap, articulated at least indirectly to the surface of one of the walls and being subjectable to both a sealing force which forces the valve flap against a valve seat surrounding an opening in the wall surface and to an opening force which lifts the flap off the valve seat. The flap valve has a first position in which the protected space is sealed off from a contaminated environment, and a second position in which air from the protected space is allowed to escape into the environment via the opening, wherein the sealing force is a magnetic attraction between a portion of the surface of the valve flap and the valve seat. A method for controlling the air pressure within a protected space is also provided.